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Know Your Farm BUSINESS

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Business methods are essential to getting maximum returns from your farm. And one of the best business methods is keeping a set of accurate farm records and analyzing them carefully at the end of the year.

This pamphlet supplies some forms and methods for studying a farm business that usually are not included in farm record and account books. These forms and methods, although setup to supplement the third edition of the *Minnesota Farm Account Book,* can be used with any good account book. The *Minnesota Farm Account Book* has instructions and forms for calculating net worth, return to capital and family labor, labor earnings, crop yields per acre, and the quantity and value of feed consumed by livestock. It is available from the Burgess Publishing Co., 426 South 6th Street, Minneapolis, Minn. 55415, or from your local county extension office.

Included in this publication are forms for determining value produced by the various livestock enterprises and return above feed cost. Also included is a form for determining the value of crops produced during the year in which credit is given to crops for feed raised on the farm and consumed by livestock. Sales of livestock and crops alone do not present a complete picture. You may have large purchases during the year and big changes in the quantity on hand from the beginning to the end of the year.

Likewise, to find the net cost of maintaining service enterprises, such as tractors and crop machinery, trucks, autos, livestock equipment, and farm buildings, you must consider depreciation as well as repairs, gas, and similar expenses.

Page and column numbers shown in the forms in this pamphlet refer to the third edition of the *Minnesota Farm Account Book.* If you wish, you can change the headings to fit special enterprises. Even if you have not kept feed records, you can determine value produced by your livestock enterprises.

The return over feed cost and the return for $100 of feed give an indication of the success of each livestock enterprise, since feed is the largest single expense in livestock production. Return over feed is the amount available to the farmer to pay for labor, housing, equipment, power, interest, and miscellaneous cash costs.

In dairying, the cost of feed represents approximately 50 percent of the total cost of maintaining a dairy cow for a year. As a rule, you should receive $200 of return for $100 of feed in order to cover all costs in dairying, including a modest amount for labor. In hog production, feed costs range from 65 to 75 percent of the total. So a farmer has to receive $135-$140 of return for each $100 of feed consumed by hogs to break even. In general, other classes of livestock range between these two extremes.

Return over feed does not show how the enterprise can be improved; it merely shows whether or not that part of the business is profitable. Determining the reason for lack of success requires additional study of the enterprise. Some clues regarding success or lack of it can be secured by calculating production rates (butterfat and milk per cow, eggs per hen, and pigs per litter) on the Financial Summaries that are included with the *Minnesota Farm Account Book.*

Return over feed from livestock

	Dairy cows			Other dairy cattle			Beef breeding herd			Sheep, farm flock			Chickens		
Item	From page	From col.	Value	From page	From col.	Value	From page	From col.	Value	From page	From col.	Value	From page	From col.	Value
Inventory, end of year	5	14		8	21		10	22		18	9		20	7	
Sales	5	26		9	25		11	39		19	18		21	20	
Butchered for home use	4	5		8	4		10	5		18	20		20	15,18	
Transfers out	5	6		8	8,11		10	12				xxx			xxx
(1) Totals															
Inventory, beginning of year	5	9		8	15		10	16		18	4		20	3	
Bought	4	22		9	17		11	18		18	26		20	26	
Transfers in	5	3				xxx	10	9				xxx			xxx
(2) Totals															
(3) Net increases (1) – (2)															
Products sold	2	11				xxx	2	11		19	25		22	41	
Products used in home	2	2,3				xxx	2	2,3				xxx	20	20	
Products fed	2	4,5				xxx	2	4,5				xxx			xxx
(4) Total products															
(5)Total value produced (3) + (4)															
(6) Total feed cost	*			*			*			*			*		
(7) Total return above feed cost (5) – (6)															
(8) Average number of head	4			9			11			18			21		
(9) Return over feed cost per head (7) ÷ (8)															
Return for $100 feed (5) ÷ (6)															

*From Crop and Feed Check, *Minnesota Farm Account Book.*

Return over feed from livestock (continued)

	Hogs						Feeder cattle, feeder lambs, or turkeys					
	Weight			Value			Weight			Value		
Item	From page	From col.	Pounds	From page	From col.	Value	From page	From col.	Pounds	From page	From col.	Value
Inventory, end of year	16	13		16	14		12	13		12	14	
Sales	17	12		17	14		13	18		13	20	
Butchered for home use	16	4		16	5		12	24		12	25	
Transfers out			xxx			xxx						
(1) Totals												
Inventory, beginning of year	16	8		16	9		12	7		12	8	
Bought	16	37		16	39		13	27		13	29	
Transfers in			xxx			xxx	12	19		12	20	
(2) Totals												
(3) Pounds produced and net increase in value (1) – (2)												
(4) Total feed cost			xxx	*					xxx	*		
(5) Total return above feed cost (3) – (4)			xxx						xxx			
(6) Number of hundredweights produced (pounds produced ÷ 100)			xxx						xxx			
(7) Return over feed cost per 100 pounds (5) – (6)			xxx						xxx			
Return for $100 feed (3) ÷ (4			xxx						xxx			

*From Crop and Feed Check, *Minnesota Farm Account Book.*

Net power and machinery expense

Item	Tractor and crop machinery			Truck (farm share)			Automobile (farm share)			Electricity (farm share)		
	From page*	From col.	Value	From page*	From col.	Value	From page*	From col.	Value	From page*	From col.	Value
Inventory, beginning of year	D4-11	†		D2,3	†		D2,3	†				xxx
Bought	42	5†		42	5†		42	5†				xxx
Repairs and parts	49	18		47	22		47	23,24				xxx
Gas, oil, grease, and electricity	45	37		45	39		45	41		52	16	
(1) Totals												
Inventory, end of year	D4-11	†		D2,3	†		D2,3	†				xxx
Sales	43 44	29† 3		43	29†		43	29†				xxx
(2) Totals												xxx
Net expense (1) – (2)												

*D refers to the Four Year Depreciation Schedule in the envelope inside the back cover of the *Minnesota Farm Account Book.*
†Take only specified items.

Net equipment and building expense

Item	Livestock equipment			Buildings and fences		
	From page*	From col.	Value	From page*	From col.	Value
Inventory, beginning of year	D12-15	†		D16-19	†	
Bought	42	5†		42	5†	
Repairs and parts	41	3		41	11	
Gas, oil, grease, and electricity			xxx			xxx
(1) Totals						
Inventory, end of year	D12-15	†		D16-19	†	
Sales	43	29†		43	29†	
(2) Totals						
Net expense (1) – (2)						

*D refers to the Four Year Depreciation Schedule in the envelope inside the back cover of the *Minnesota Farm Account Book.*
†Take only specified items.

Return from all crops

Item	From page	From col.	Value
Inventory, end of year	31	23	
Crop sales	37	12	
Value of feed fed	*		
(1) Total			
Inventory, beginning of year	31	18	
Feed purchases	36	68	
Miscellaneous crop expense	39	18	
Milk fed	*		
(2) Total			
Net value of crops produced (1) – (2)			
Number of crop acres	29	2,8	
Value produced per acre			

*From Crop and Feed Check, *Minnesota Farm Account Book.*

Net expense for tractors and crop machinery $ _____
Crop acres (page 29, part of columns 2 and 8) _____
Tractor and crop machinery expense per crop acre (1) ÷ (2) $ _____

Crops are a major source of income on many farms when credit is given to crops for feed raised on the farm and consumed by livestock. In the accompanying tables, feed purchases are included as expenses, since they are included in the value of feed fed. Value produced per acre can be studied along with yields per acre, as shown on page 29 of the *Minnesota Farm Account Book.*

Tractors and crop machinery, livestock equipment, buildings, etc. can be considered as service enterprises, with a goal of holding costs to a reasonable basis. Excessive costs may result in low earnings from the farm. On the other hand, production may be lowered if the farm is underequipped.

Tractor and crop machinery costs per crop acre are one measure of efficiency in machinery use. You can determine cost per mile for trucks and autos by recording the number of miles you drive.

If you need assistance in summarizing your farm business or if you want a more complete summary, see your county extension agent or local vocational-agriculture instructor.

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